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March 2, 2004

CERTIFICATE OF MAILING 37 C.F.R 1.8

I hereby certify that this correspondence is being deposited with the U.S. Postal Service with sufficient postage as First Class Mail in an envelope addressed to: MS DD, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on the date below:

March 2, 2004

Date

teven L. Highlander

MS DD

Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

RE:

U.S. Patent Application No. 10/724,806 entitled "HUMAN AND MOUSE CHOLINE

TRANSPORTER cDNA" - Randy D. Blakely et al.

Our reference: VBLT:008USD1 Client reference: VU 0141

Sir:

Enclosed for filing in the above-referenced patent application is an Information Disclosure Statement, and Form PTO-1449.

No fees are believed to be due in connection with the filing of this Information Disclosure Statement, however, should any fees under 37 C.F.R. §§ 1.16 to 1.21 be deemed necessary for any reason relating to the enclosed materials, the Commissioner is authorized to deduct the appropriate fees from Fulbright & Jaworski Deposit Account No.: 50-1212/VBLT:008USD1.

Please date stamp and return the enclosed posteard evidencing receipt of these materials.

Respectfully submitted,

Steven I). Highlander Reg. No. 37,642

SLH/kmv

Encl.: as noted

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

é Application of:
Randy D. Blakely *et al*.

Serial No.: 10/724,806

Filed: December 1, 2003

For: HUMAN AND MOUSE CHOLINE

TRANSPORTER cDNA

Group Art Unit: Unknown

Examiner: Unknown

Atty. Dkt. No.: VBLT:008USD1

CERTIFICATE OF MAILING 37 C.F.R 1.8

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March 2, 2004

Date

Steven L. Highlander

INFORMATION DISCLOSURE STATEMENT

MS DD

Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

Sir:

In compliance with the duty of disclosure under 37 C.F.R. § 1.56, it is respectfully requested that this Information Disclosure Statement be entered and the documents listed on attached Form PTO-1449 be considered by the Examiner and made of record.

In accordance with 37 C.F.R §§ 1.97(g), (h), this Information Disclosure Statement is not to be construed as a representation that a search has been made, and is not to be construed to be an admission that the information cited is, or is considered to be, material to patentability as defined in 37 C.F.R. § 1.56(b).

The present Information Disclosure Statement is being filed prior to the receipt of a first

Official Action reflecting an examination on the merits, and hence is believed to be timely filed

in accordance with 37 C.F.R § 1.97(b). No fees are believed to be due in connection with the

filing of this Information Disclosure Statement, however, should any fees under 37 C.F.R.

§§ 1.16 to 1.21 be deemed necessary for any reason relating to these materials, the

Commissioner is authorized to deduct the appropriate fees from Fulbright & Jaworski Deposit

Account No.: 50-1212/VBLT:008USD1.

This application is a divisional application of Serial No. 09/911,077, filed July 23, 2001

and is relied upon for an earlier filing date under 35 U.S.C. § 120. In accordance with Rule 37

C.F.R. § 1.98(d) copies of the listed documents are not enclosed as they have been previously

cited by or submitted to the Patent and Trademark Office in prior application Serial No.

09/911,077.

Applicants respectfully request that the listed documents be made of record in the present

case.

Respectfully submitted,

Steven L Highlander

Reg. No. 37,642

Attorney for Applicants

FULBRIGHT & JAWORSKI L.L.P. 600 Congress Avenue, Suite 2400 Austin, Texas 78701 (512) 474-5201

Date:

March 2, 2004

Form PTO-1449 (modified)		Atty. Docket No.	Serial No.
		VBLT:008USD1 10/724,806	
1 PE	r Applicant's	Applicant	
ILE W		Randy D. Blakely et al.	
INFORMATION DISCLOSURE S	STATEMENT		
0 5 2004 (3)		Filing Date:	Group:
(Use several sheets if necess: U.S. Patent Documents See Page 1	ary)	December 1, 2003	Unknown
U.S. Patent Documents	Foreign	Patent Documents	Other Art
See Page 1		See Page 1	See Page 1

U.S. Patent Documents

Exam. Init.	Ref. Des.	Document Number	Date	Name	Class	Sub Class	Filing Date of App.
	A1	5,658,786	8/19/97	Smith et al.	435	365	3/4/93
	A2	6,500,643	12/31/02	Wu et al.	435	69.1	9/07/00

Foreign Patent Documents

Exam. Init.	Ref. Des.	Document Number	Date	Country.	Class	Sub Class	Translation Yes/No
	B1	DE 10009055	8/01	Germany			

Other Art (Including Author, Title, Date Pertinent Pages, Etc.)

Exam. Init.	Ref. Des.	Citation
	C1	Apparsundaram et al., "Immunocytochemical localization of hemicholinium-3-sensitive choline transporters," Soc. For Neuroscience, ABSTRACT, Nov. 10-15, 2001, San Diego.
	C2	Apparsundaram et al., "Molecular cloning and characterization of human and murine high-affinity choline transporters," Soc. Neurosci., ABSTRACT, 26:15350, 2000. Abstract found at the Society for Neuroscience website: http://www.nfs.org, December 26, 2001.
	C3	Apparsundaram et al., "Molecular cloning and characterization of a murine, hemicholinium-3-sensitive choline transporter," Biochemical Society Transactions, 29(6):711-716, 2001.
	C4	Apparsundaram et al., "Molecular cloning of a human, hemicholinium-3-sensitive choline transporter," Biochem. Biophys. Res. Communications, 276:862-867, 2000.
	C5	Barnwell et al., "Cloning and sequencing of a cDNA encoding a novel member of the human brain GABA/noradrenaline neurotransmitter transporter family," Gene, 159:287-288, 1995.
	C6	Bork et al., "Go hunting in sequence databases but watch out for the traps," Trends in Genetics, 12(10):425-427, 1996.
	C7	Bork, "Powers and pitfalls in sequence analysis: the 70% hurdle," Genome Res., 10:398-400, 2000.
	C8	Brenner, "Errors in genome function," Trends in Genetics, 15(4):132-133, 1999.

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Examiner:	DATE CONSIDERED:

EXAMINER: INITIAL IF REFERENCE CONSIDERED, WHETHER OR NOT CITATION IS IN CONFORMANCE WITH MPEP609; DRAW LINE THROUGH CITATION IF NOT IN CONFORMANCE AND NOT CONSIDERED. INCLUDE COPY OF THIS FORM WITH NEXT COMMUNICATION TO APPLICANT.

Form PTO-1449 (modified)	Atty. Docket No. VBLT:008USD1	Serial No. 10/724,806
P EList of Patents and Publications for A	Randy D. Blakely et a	al.
MAR 0 5 2004 (Use several sheets if necessar	Filing Date:	Group: Unknown
U.S. Patent Documents See Page 1	Foreign Patent Documents See Page 1	Other Art See Page 1

(Other Art (Including Author, Title, Date Pertinent Pages, Etc.)					
Exam. Init.	Ref. Des.	Citation				
	C9	Dai et al., "Cloning and characterization of the thyroid iodide transporter," Nature, 379:458-459, 1996.				
	C10	Doerks et al., "Protein annotation: detective work for function prediction," Trends in Genetics, 14(6):248-250, 1998.				
	C11	Ferguson <i>et al.</i> , "Regulated subcellular localization of high-affinity choline transporters (CHTs) supported by protein phosphatase 2A interactions," <i>Soc. For Neuroscience</i> , ABSTRACT, Nov. 10-15, 2001, San Diego.				
·	C12	Fisher et al., "Transport of choline by plasma membrane vesicles from lung-derived epithelial cells," Am. J. Physiol., 263(6 pt 1):C1250-1257, 1992.				
	C13	GenBank Accession Number AB030947, Okuda et al., Feb. 2000.				
	C14	GenBank Accession Number AB043997, Okuda et al., Nov. 2000.				
	C15	GenBank Accession Number AC009933, Heath, Jul. 2001.				
	C16	GenBank Accession Number AC009963, Waterston, Aug. 2001.				
	C17	GenBank Accession Number AC023672, Waterston, Nov. 2001.				
	C18	GenBank Accession Number AF276871, Apparsundaram et al., Nov. 2000.				
·	C19	GenBank Accession Number AF276872, Apparsundaram et al., Feb 2001.				
	C20	GenBank Accession Number AJ401466, Wieland et al., Aug. 2000.				
	C21	GenBank Accession Number Z17178, Weissenbach, Nov. 1994.				
	C22	GenBank Accession Number Z23978, Weissenbach, Nov. 1994.				
	C23	GenBank Accession Number Z53730, Weissenbach, Mar. 1996.				
	C24	Guimbal and Kilimann, "A Na ⁺ -dependent creatine transporter in rabbit brain, muscle, heart, and kidney," <i>J Biol Chem</i> , 268(12):8418-8421, 1993.				
	C25	Hediger et al., "Expression cloning and cDNA sequencing of the Na ⁺ /glucose co-transporter," Nature, 330:379-381, 1987.				
	C26	Lockman et al., "The transport of choline," Drug Develop. Indust. Pharm., 28(7):749-771, 2002.				

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Form PTO-1449 (modified)		Atty. Docket No.	Serial No.
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See Page 1		ee Page 1	See Page 1

(Other Art (Including Author, Title, Date Pertinent Pages, Etc.)					
Exam. Init.	Ref. Des.	Citation				
	C27	Mayser <i>et al.</i> , "Primary structure and functional expression of a choline transporter expressed in the rat nervous system," <i>FEBS</i> , 305(1):31-36, 1992.				
	C28	Ngo et al., "Computational complexity, protein structure prediction, and the Levinthal paradox," The Protein Folding Problem and Tertiary Structure Prediction, 492-495, 1994.				
	C29	Nikawa et al., "Primary structure of the yeast choline transport gene and regulation of its expression," J. Biol. Chem., 265(26):15996-16003, 1990.				
	C30	O'Regan et al., "An electric lobe suppressor for a yeast choline transport mutation belongs to a new family of transporter-like proteins," PNAS, 97(4):1835-1840, 2000.				
	C31	Okuda and Haga, "Functional characterization of the human high-affinity choline transporter," FEBS Letters, 484:92-97, 2000.				
	C32	Okuda et al., "Identification and characterization of the high-affinity choline transporter," Nature Neuroscience, 3(2):120-125, 2000.				
	C33	Okuda et al., "Single nucleotide polymorphism of the human high affinity choline transporter alters transport rate," J. Biol. Chem., 277(47):45315-43522, 2002.				
	C34	Phillips, "The challenge of gene therapy and DNA delivery," <i>Pharm. Pharmacol.</i> , 53:1169-1174, 2001.				
	C35	Schloss et al., "The putative rat choline transporter CHOT1 transports creatine and is highly expressed in neural and muscle-rich tissues," Biochem Biophys Res Commun, 198(2):637-645, 1994.				
	C36	Skolnick et al., "From genes to protein structure and function: novel applications of computational approaches in the genomic era," <i>Trends in Biotech.</i> , 18(1):34-39, 2000.				
	C37	Smith et al., "The challenges of genome sequence annotation or 'The devil is in the details," Nature Biotech., 15:1222-1223, 1997.				
*	C38	Turk and Wright, "Membrane topology motifs in the SGLT cotransporter family," <i>J Membr Biol</i> , 159:1-20, 1997.				
	C39	Wells, "Additivity of mutational effects in proteins," Biochemistry, 2(37):8509-8517, 1990.				
	C40	Zoli et al., "Increased neurodegeneration during ageing in mice lacking high-affinity nicotine receptors," EMBO Journal, 18(5):1235-1244, 1999.				

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